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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,562	09/28/2004	Marco Jan Gerrit Bekooij	NL02 0263 US	9596
24738	7590	04/14/2006	EXAMINER	
PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 1109 MCKAY DRIVE, M/S-41SJ SAN JOSE, CA 95131			KIM, KENNETH S	
			ART UNIT	PAPER NUMBER
			2111	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/509,562

Applicant(s)

BEKOOIJ ET AL.

Examiner

Kenneth S. KIM

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

KENNETH S. KIM  
PRIMARY EXAMINER

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

1. Claims 1-8 are presented for examination.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 1, it is not clear what is meant by "partially connected".

(b) Claim 5, it is not clear what is the configuration of the register with respect to the multiplexer.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Khan et al, U.S. Patent Application Publication No. 2002/0120915.

Khan et al teaches the invention as claimed in claim 1 including a VLIW processor comprising:

- (a) a plurality of functional units (210-290),
- (b) a distributed register file accessible by the functional units (200, 250),
- (c) a partially connected communication network for coupling the functional units and selected parts of the distributed register tile (par. 36, line 13), characterized in that the VLIW processor further comprises communication means for coupling the functional units and the distributed register file (par. 36, line 15), and

further teaches as in claims 2-8,

- (d) the communication means comprise a multiplexer and a bus, the multiplexer being arranged for coupling the functional units and the bus, the bus being arranged for coupling the multiplexer and the distributed register file (fig. 2) – claim 2,
- (e) the communication means are arranged for communication with a first latency, the partially connected communication network is arranged for communication with a second latency, the first latency exceeding the second latency (can be any latency) – claim 3,
- (f) the bus comprises at least one pipeline register and the multiplexer comprises at least one register (registers used to latch data) – claims 4 and 5,
- (g) a first plurality of functional units (data path A), and a second plurality of functional units (data path B) a first pass unit associated with one of the functional units (202) of the first plurality for passing data from one of the distributed register tiles associated with the first plurality of functional units to one of the distributed register files associated

with the second plurality of functional units and a second pass unit (252) associated with one of the functional units of the second plurality for passing data from one of the distributed register files associated with the second plurality of functional units to one of the distributed register files associated with the first plurality of functional units – claims 6 and 7, and

(h) the communication means couple the functional units and all parts of the distributed register tile (both A and B) – claim 8.

6. Claims 1, 3, and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Arora et al, U.S. Patent No. 6,629,232.

Arora et al teaches the invention as claimed in claim 1 including a VLIW processor (fig. 5) comprising:

(a) a plurality of functional units (131, 132),  
(b) a distributed register file accessible by the functional units (510, 520),  
(c) a partially connected communication network for coupling the functional units and selected parts of the distributed register tile (RW), characterized in that the VLIW processor further comprises communication means for coupling the functional units and the distributed register file (321), and

further teaches as in claims 3 and 6-8,  
(d) the communication means are arranged for communication with a first latency, the partially connected communication network is arranged for communication with a second latency, the first latency exceeding the second latency (can be any latency) – claim 3,

(e) a first plurality of functional units (535), and a second plurality of functional units (data path B) a first pass unit associated with one of the functional units (202) of the first plurality for passing data from one of the distributed register tiles associated with the first plurality of functional units to one of the distributed register files associated with the second plurality of functional units and a second pass unit (536) associated with one of the functional units of the second plurality for passing data from one of the distributed register files associated with the second plurality of functional units to one of the distributed register files associated with the first plurality of functional units – claims 6 and 7, and

(f) the communication means couple the functional units and all parts of the distributed register tile (both 510 and 520) – claim 8.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jacobson et al taught a method of using a distributed register file.

Saulsbury et al taught a method of using multiple register files.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth S KIM whose telephone number is (571) 272-3627. The examiner can normally be reached on M-F (8:30-17:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

KENNETH S. KIM  
PRIMARY EXAMINER